

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1-6. (Cancelled)

7. (Currently amended) A method for identifying a gamma secretase and/or a beta-secretase modulator comprising the following steps:

- a). identifying of a fatty acid Δ6 desaturase (FADS2)-interacting molecule by determining whether a given test compound is a FADS2 interacting molecule binds to FADS2, and
- b). determining whether the FADS2-interacting molecule of step a) is capable of modulating gamma secretase and/or beta-secretase activity.

8. (Previously presented) The method of claim 7, wherein in step a) the test compound is brought into contact with FADS2 and the interaction of FADS2 with the test compound is determined.

9. (Previously presented) The method of claim 8, wherein the interaction of the test compound with FADS2 results in an inhibition of FADS2 activity.

10. (Currently amended) The method of claim 7, wherein in step b) the ability of the gamma secretase and/or the beta secretase to cleave amyloid precursor protein (APP) is measured.

11. (Currently amended) A method for preparing a pharmaceutical composition for the treatment of neurodegenerative diseases comprising the following steps:

- a). identifying a gamma secretase and/or beta-secretase modulator according to claim 7, and
- b). formulating the gamma secretase and/or beta-secretase modulator to a pharmaceutical composition.

12-68. (Cancelled)